

7000 Series Buccaneer®



Robust, rapid connections for harsh environments

The all plastic construction 7000 Series Buccaneer - circular connectors that combine the ease of use of a quick coupling mechanism with proven environmental sealing for signal and mains power.

Designed and independently tested to IP66, IP68 & IP69K standards, they are ideal for applications where ingress of dust and water must be avoided and where ease of connection, space and appearance are important considerations.

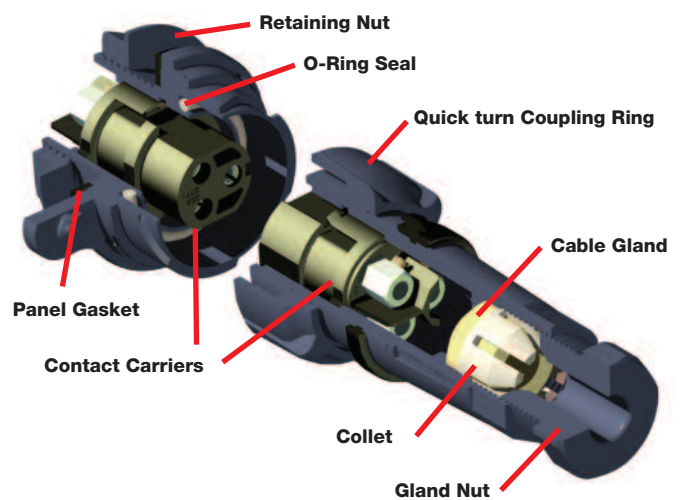
IP66

IP68

IP69K

For Power

THERMO-PLASTIC VERSION



● Less than 1/4 Turn locking mechanism	Secure, quick connector mating and release
● Positive feedback on locking mechanism	Confidence that connector is correctly mated and sealed
● IP66, IP68 and IP69K when mated	Suitable for a wide range of dust and water borne environments
● All plastic body version; UL94-V0 rated, UV stable, halogen free	Light-weight, self-extinguishing material suitable for long-term outdoor use
● Flex, flex in-line & panel mount body styles, with sealing caps	Complete family of products maintain sealing integrity in all styles
● Polarisation and visual alignment features	Aids the correct mating of connectors
● 2 to 32 poles – up to 25A, 600V rated	Suitable for mains power to signal applications
● 'Scoop proof' contacts	Prevents damage through mis-mating – ideal for 'blind mating' applications
● cULs, UL, VDE, CCC approvals (pending)	Internationally recognised certification

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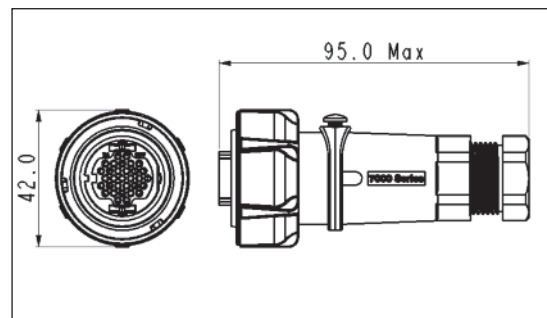
Thermo-plastic Version

FLEX CABLE CONNECTOR



PXP7010

- Mates with In-Line Flex or Panel Mounting versions PXP7011 & PXP7012
- Quick turn locking ring
- Pin or socket versions
- Leading earth on 3 pole connectors
- 2, 3, 6, 10 & 32 pole
- Screw and crimp termination



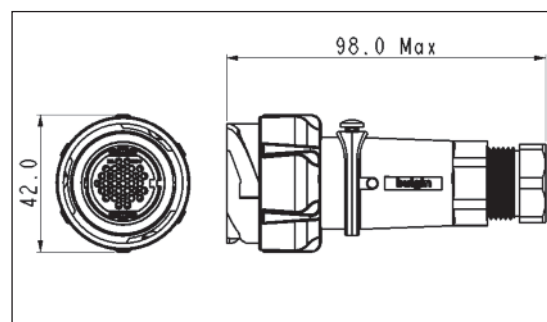
Poles	Termination	Pin Contacts	Socket Contacts	Contacts
2	Screw	PXP7010/02P/ST	PXP7010/02S/ST	Supplied Fitted
3	Screw	PXP7010/03P/ST	PXP7010/03S/ST	Supplied Fitted
6	Screw	PXP7010/06P/ST	PXP7010/06S/ST	Supplied Fitted
10	Crimp	PXP7010/10P/CR	PXP7010/10S/CR	Order Separately
32	Crimp	PXP7010/32P/CR	PXP7010/32S/CR	Order Separately

IN-LINE FLEX CABLE CONNECTOR



PXP7011

- Mates with Flex Cable connector PXP7010
- For in-line cable connection
- Pin or socket versions
- Leading earth on 3 pole connectors
- 2, 3, 6, 10 and 32 pole
- Screw and crimp termination



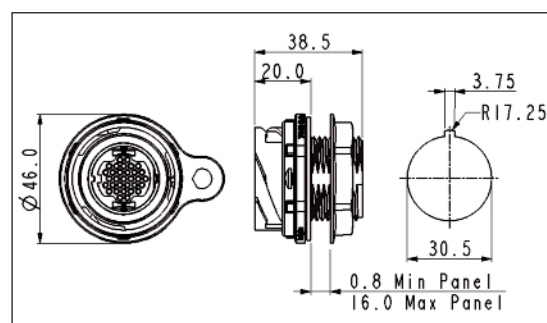
Poles	Termination	Pin Contacts	Socket Contacts	Contacts
2	Screw	PXP7011/02P/ST	PXP7011/02S/ST	Supplied Fitted
3	Screw	PXP7011/03P/ST	PXP7011/03S/ST	Supplied Fitted
6	Screw	PXP7011/06P/ST	PXP7011/06S/ST	Supplied Fitted
10	Crimp	PXP7011/10P/CR	PXP7011/10S/CR	Order separately
32	Crimp	PXP7011/32P/CR	PXP7011/32S/CR	Order separately

FRONT PANEL MOUNTING CONNECTOR



PXP7012

- Mates with Flex Cable connectors PXP7010
- Front panel mounting
- Single hole fixing
- Pin or socket versions
- Leading earth on 3 pole connectors
- 2, 3, 6, 10 and 32 pole
- Screw and crimp termination



Poles	Termination	Pin Contacts	Socket Contacts	Contacts
2	Screw	PXP7012/02P/ST	PXP7012/02S/ST	Supplied Fitted
3	Screw	PXP7012/03P/ST	PXP7012/03S/ST	Supplied Fitted
6	Screw	PXP7012/06P/ST	PXP7012/06S/ST	Supplied Fitted
10	Crimp	PXP7012/10P/CR	PXP7012/10S/CR	Order separately
32	Crimp	PXP7012/32P/CR	PXP7012/32S/CR	Order separately

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Thermo-plastic Version

CRIMP CONTACTS



10 & 32 pole contacts

- Crimp Contacts
- Gold Plated
- Current ratings:
 - 10 pole: 10A
 - 32 pole: 2A

Contacts - Crimp for 10 and 32 pole

Contacts (for 10 pole) (Supplied in packs of 10)

	Crimp
Pins	SA3544/P
Sockets	SA3544/S

Contacts (for 32 pole) (Supplied in packs of 10)

	Crimp
Pins	SA3542/P
Sockets	SA3542/S

CRIMP TOOLING



PNo 14025

- Crimp Tools for 10 and 32 pole crimp contacts

Crimp Tooling

Crimp Tool (10 & 32 pole)	PNo. 14025
Positioner (10 pole)	PNo. 15021/SP
Positioner (32 pole)	PNo. 15019/SP

EXTRACTION TOOLS



PNo 14944/SP PNo 14945/SP

- Extraction tool for 10 and 32 pole contacts

Extraction tools

Extraction tool (10 pole)	PNo. 14945/SP
Extraction tool (32 pole)	PNo. 14944/SP

CONTACT CARRIER REMOVAL TOOL



PNo 15065/SP

- For removal of all contact carriers

Tools

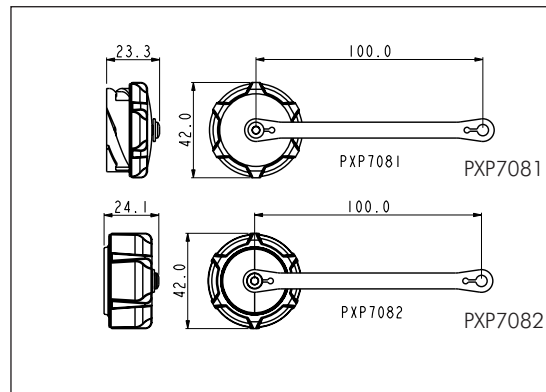
Contact carrier removal tool (all poles)	PNo. 15065/SP
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Thermo-plastic Version

SEALING CAPS



- Maintains IP rating of unmated connectors
- PXP7081: Fits PXP7010 (Flex Connector)
- PXP7082: Fits PXP7011 (Flex In-Line Connector) and PXP7012: (Panel Connector)



CABLE GLAND PACKS



- Packs of cable glands, cages and gland nuts to suit cables ranges from 5.0 to 15.0mm diameter
- PXP7088/0507: for cable ranges between 5.0 and 7.0mm
- PXP7088/0713: for cable ranges between 7.0 and 13.0mm
- PXP7088/1315: for cable ranges between 13.0 and 15.0mm

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Thermo-plastic Version

PART NO SYSTEM

PXP / xxxx / xx x / xx / xxxx

Plastic Connector Designation

Series

7 = 7000 Series

Body Styles

010 = Flex

011 = Flex In-Line

012 = Panel

No. of Contacts

02 = 2 Pole

03 = 3 Pole

06 = 6 Pole

10 = 10 Pole

32 = 32 Pole

Contacts Type

P = Pin

S = Socket

Terminations

ST = Screw Terminal (2, 3, & 6 pole only)

CR = Crimp Contacts (10 & 32 pole only)

Cable Entry Size

(for Flex and Flex In-Line connectors only)

0507 = 5-7mm (grey)

0709 = 7-9mm (white)

0911 = 9-11mm (black)

1113 = 11 to 13 mm (yellow)

1315 = 13 to 15 mm (light grey)

Examples:

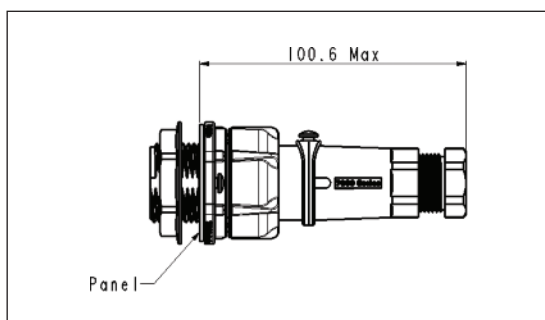
PXP7010/03P/ST/0709 = 3 pole, flex connector, with pin contacts and screw terminals for 7-9mm diameter cable

Thermo-plastic Version

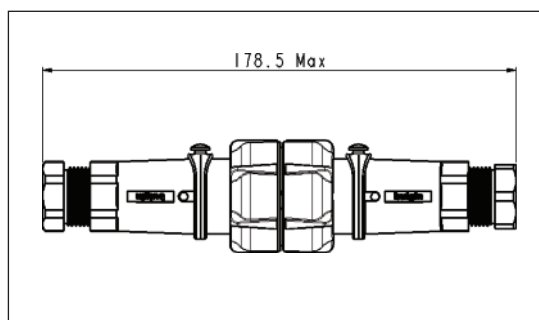
SPECIFICATION

Electrical:						Mechanical:	
No. Poles:	2	3	6	10	32	Locking mechanism	Quarter turn, rapid locking
Current Rating:						Sealing:	IP66 to EN60529:1992 IP68 to EN60529:1992 (10m depth for 2 weeks) IP69k to DIN 40050-9
CCC, UL and VDE (pending)	25A	25A	10A	10A	3A	Contact Accommodation: 2 & 3 pole screw terminals 6 pole screw 10 pole crimp 32 pole crimp	6.0mm² max 1.00mm² max 18 to 20AWG 22 to 26AWG
cUL (pending)	25A	25A	8A	6A	2A		
Voltage Rating (ac/dc):							
CCC, VDE (pending)	600V	600V	500V	277V	200V		
UL, cUL (pending)	600V	600V	600V	600V	600V	Cable Acceptance:	5-15mm dia.
Contact Resistance:	<10mΩ					Cable retention force	80N 100N
Insulation Resistance:	>10⁹MΩ @500V dc					(to BS EN61984):	
AC Breakdown voltage:						5 - 9mm dia cable	
2 pole	>10kV					9 - 15mm dia cable	
3 pole	>8kV					Terminations:	
6 to 32 pole	>5kV					2 Pole:	Screw Terminals
Operating Temp. Range:	-40°C to +120°C					3 Pole:	Screw Terminals
Approvals (pending):						6 Pole:	Screw Terminals
UL	UL1977					10 Pole:	Crimp Contacts
CSA	C22.2 No.182.3-M1987 (R2009)					32 Pole:	Crimp Contacts
VDE	IEC 61984:2009					Tightening Torques:	
CCC	GB/T11918 and GB/T11919					Gland Nut:	TBA
						Panel Nut:	1.7Nm (15lbf.in.)
						Panel Nut Thread:	M30 x 2-6g
						Dimensions:	
						Diameter: (over coupling ring)	42mm
						Diameter: (panel hole cut-out)	30mm
Material:							
Body:	PC/ PBT						
Colour:	Grey						
Flammability Rating:	UL94 V-0						
Halogen free	Yes						
UV Resistance:	ISO 4892 part 3 cycle 1 (QUV)						
Contacts:	Brass, Nickel plated (2A – Gold plated)						
O Rings & Gaskets:	Silicon						
RoHS	Compliant						

Mated dimensions - Flex to panel connector



Mated dimensions - Flex connector to in-line connector



Thermo-plastic Version

CURRENT CARRYING CAPACITY

The thermal properties of the materials used in the construction of a connector limit the current carrying capacity. There are a number of factors that determine the amount of current that can be handled: contact spacing, size of cable, ambient temperature and the heat that is generated by the current passing through the connector.

The maximum current varies with different contact layouts, and because of these factors it is necessary to produce de-rating curves for each pole variant. This de-rating curve is specified in the standard IEC 60512 part 3.

De-rating curves are plotted for each contact carrier combination with the current being carried simultaneously by all contacts. These graphs show the heat rise generated as the current is increased.

The red line indicates the direct correlation between current applied and the measured temperature rise within the connector. The dotted blue line shows rated current and the green line is derived by applying a factor of 0.8 to the original plot data to give a de-rating curve. The dashed blue line shows the rated current.

The shaded area under the 0.8 curve shows the permitted operating area, and allows safe current vs ambient temperature characteristics to be determined.

- = tested operating limits
- = de-rated operating limits
- = rated current

7000 Series Current vs. Temperature Characteristics

